

THE TAXONOMIC STATUS OF *EXPTOCHIOMERA NANA* BARBER
(HEMIPTERA: LYGAEIDAE)¹

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ABSTRACT—*Exptochiomera nana* Barber, described from Massachusetts, is placed as a junior synonym of *Suffenus fusconervosus* (Motschulsky), an Oriental species. Evidence is presented to indicate that the synonymy has resulted from a mislabelling and that the species has presumably not actually been taken in the United States. Comments on the systematic position of the genus *Suffenus* are included.

Exptochiomera nana was described by Barber (1932) from a single male (USNM type number 43853), labelled as having been collected by the late C. A. Frost at Framingham, Massachusetts in December of 1913. Despite intensive efforts to obtain this species by the senior author during the course of his ecological and biological studies of New England Rhyparochrominae as well as extensive collecting in the northeastern States by such competent hemipterists as H. G. Barber, H. M. Parshley, J. R. de la Torre Bueno and others, no additional specimens of *Exptochiomera nana* have been taken.

The senior author corresponded with Mr. Frost in 1962 shortly before the latter's death and Mr. Frost recalled collecting the stated specimen but that the date and location were in error and should have been August 21, 1921, at Wareham, Massachusetts, and that at Mr. Barber's urging he had attempted without success to obtain additional material. Sweet (1964) suggested that the species might have been introduced and noted that the junior author had examined the holotype prior to 1964 and had believed that it might be related to the Oriental genus *Suffenus*. Sweet (1967) noted that the holotype may have been mislabelled.

We have both independently had the opportunity recently to re-examine the holotype of *Exptochiomera nana* and to compare it with Oriental specimens of *Suffenus fusconervosus* (Motschulsky). There is no question but that the specimens are conspecific and *Exptochiomera nana* must become a junior synonym.

Although it is not absolutely impossible that Mr. Frost actually

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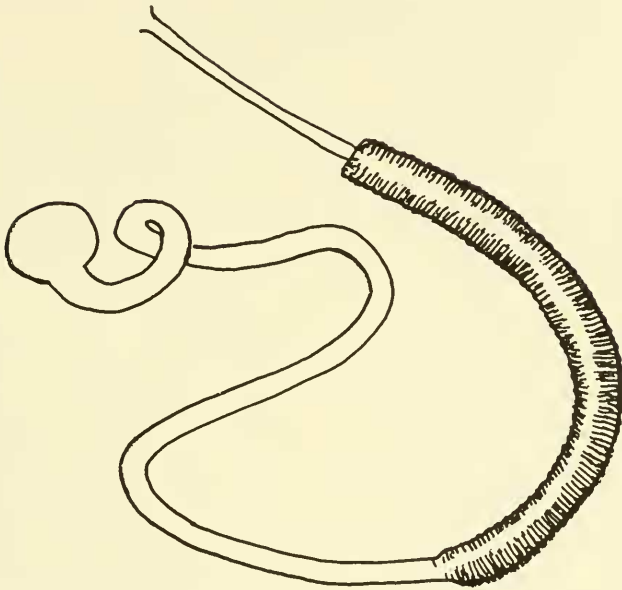


Fig. 1. Spermatheca of *Suffenus fusconervosus*.

collected the holotype of *Exptochiamera nana* in Massachusetts we believe this to be highly unlikely. It seems much more probable that the confusion has resulted from mislabelling. Mr. Frost sent material he had collected in Framingham to Dr. Walther Horn who was at the time Director of the Deutsches Entomologisches Institut in Berlin. Dr. Horn in turn sent Mr. Barber the specimen which was subsequently described as *Exptochiamera nana*. The labels on the holotype clearly indicate that it was labelled in Germany. Not only is the month spelled "Dezember" in German script but the State is placed in parentheses—a practice unlikely to have been used by an American collector. Furthermore, as Barber noted, the type specimen itself was in poor condition. Closer examination of the pattern of damage shows that the now pointed specimen evidently had once been carded since traces of glue were found along the entire venter. It was not the habit of American coleopterists to card specimens and European workers at that time rarely pointed specimens. Very probably the specimen jarred loose from its original mounting and was transposed to a pin bearing the wrong locality data. It is also germane to realize that prior to this time Dr. Horn had obtained considerable material from the Orient, particularly Ceylon, as is evidenced by papers published on the Horn material by Breddin (1907a, 1907b). Therefore we think it is most reasonable to believe that an error in labelling

was made, and that the tropical species *Suffenus fusconervosus* has never actually been taken in North America.

Mr. Frost had sent the senior author his correspondence with H. G. Barber. This correspondence indicates that Barber had also described *Blissus brevisculus* from the Frost specimens sent to him by Horn. Moreover, a close reading of the correspondence indicates that Frost was actually recalling his collecting *B. brevisculus*, and he never seems to refer to *Exptochiomera nana*. This apparent confusion on Mr. Frost's part is entirely understandable as the collection occurred over 50 years ago, and he had seen only Barber's sketch, never the actual specimen of *Exptochiomera nana*.

Suffenus is a most anomalous rhyparochromine. The very small size, the carinate pronotal margins and the general habitus give it the appearance of a member of the tribe Antillocorini. However Sweet (1967) notes that it must be included in the Myodochini because of the dorsal position of the abdominal spiracles on segments 2, 3 and 4 and the lack of inner lateroterga. Although some small Western Hemisphere myodochines such as *Exptochiomera arizonensis* Barber somewhat approach this condition there is no known Eastern Hemisphere myodochine that is even remotely related to *Suffenus*. The other Eastern Hemisphere myodochines show relationship to the "*Pachybrachius*-complex." Moreover the spermatheca (fig. 1) is unique and does not resemble any of the known myodochine spermatheca in that the apical duct is long and the bulb is small. Since the nymphs of the Myodochini have a Y-suture and those of the Antillocorini lack the suture it will be valuable to study the nymphs of *Suffenus* to either further establish its position in the Myodochini or conversely to determine if the dorsal spiracle position might be a case of convergence, and *Suffenus* to be actually a highly evolved antillocorine. At present, in the absence of contrary evidence, *Suffenus* must be regarded as a true myodochine, and the general appearance of an antillocorine to be interpreted as due to convergence.

In view of the isolated systematic position of *Suffenus* it is important to establish this synonymy and probable mislabelling. Failure to recognize this synonymy could easily have led to an error comparable to the case of the famous snapping turtle falsely described from the Fly River, New Guinea, and cited for over 40 years as indicating a remarkable disjunct distribution in the otherwise North American family Chelydridae (Loveridge and Shreve 1947).

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